MINUTES OF MEETINGS

OF THE

ISTHMIAN CANAL COMMISSION

JULY–DECEMBER

1907

Gift of the Panama Canal Museum

ISTHMIAN CANAL COMMISSION
WASHINGTON

MINUTES OF MEETINGS

OF THE

ISTHMIAN CANAL COMMISSION

JULY–DECEMBER

1907

ISTHMIAN CANAL COMMISSION
WASHINGTON

MINUTES OF THE MEETINGS OF THE ISTHMIAN CANAL COMMISSION.

ONE HUNDRED AND THIRTY-FIRST MEETING.

CULEBRA, CANAL ZONE, *August 1, 1907.*

The Commission met at the call of the Chairman at 11.15 a. m.

Present: Commissioners Goethals (Chairman), Blackburn, Gorgas, Sibert, Gaillard, and Rousseau.

Absent: Commissioner Smith.

The Commission elected the Chairman's Chief Clerk, Mr. M. B. De Putron, as Acting Secretary of the Commission for the meeting.

The minutes of the one hundred and twenty-eighth and one hundred and thirtieth meetings were read and approved.

1. The Chairman called attention to the case of Mr. W. A. Martin, clerk, who was granted twelve weeks' leave of absence with pay, effective July 16, and stated that because of peculiar circumstances he had authorized Mr. Martin to be paid in the States on regular pay periods during such leave up to September 15, payment for his leave after that date to be made on his return to the Isthmus.

The action of the Chairman was approved.

2. The Chairman presented a letter from Mr. F. M. Dearborn, clerk in the office of the Chief Engineer, who was granted eighty-one days' leave of absence with pay, effective April 20, 1907, requesting that because of ill-health his resignation be accepted and that he be paid in the States for the leave granted him. In view of the fact that Mr. Dearborn, by reason of two years' service, would be entitled to free transportation from Colon to New York, if required to return to the Isthmus, it was

Resolved, That he be paid in the States for the leave granted him on submission of Doctor's certificate showing his inability to return to the Isthmus because of illness.

3. On motion, it was

Resolved, That in case of death, from injury or disease contracted in the line of duty, of any laborer who may be indebted to the Commission for transportation to the Isthmus, no further deduction shall be made on account of transportation from wages that may be due

such laborer, but that such wages due shall be turned over to his executor, and any balance due the Commission for transportation shall be made a charge against recruiting.

4. On motion, it was

Resolved, That two Assistant Secretaries of Club Houses, capable of conducting gymnastics, be appointed at $125 per month.

5. On motion, it was

Resolved, That a suitable carriage be provided for each member of the Commission.

6. The following schedule was adopted, fixing the pay of the members of the police force, to become effective August 1, 1907:

Entrance salary of first-class policemen $80, to be increased after six months' service to $90, and after one year's service to $100.

Entrance salary of second-class policemen $40.

Corporals to receive $105 after one year's service, including service as first-class policemen. If less than one year's service has been rendered when promoted to the rank of corporal, salary to be $100 for the remainder of the year.

Sergeants to receive $120 per month after continuous service of one year on the police force, excepting six sergeants now receiving $125 per month, who will continue to be paid at this rate until their separation from this position, when the $125 rate will lapse.

All ordinary policemen after having served two years continuously as policemen shall be entitled to an increase in pay of $5 per month, and after having served five years continuously shall be entitled to an additional increase in pay of $5 per month.

All other members of the police force below the rank of Second Lieutenant who shall have served in the police force two years continuously, whether in one rank or another, shall be entitled to a service increase, in addition to the regular pay of their respective ranks, of $7.50 per month, and after a continuous service of five years in the police force to a further increase in service pay of $7.50 per month: *Provided, however*, That members of the force who have served in a higher rank than that of corporal for two and five years, respectively, shall be entitled to an additional increase of $2.50 per month for two years' continuous service, and $2.50 additional for five years' continuous service, over and beyond the regular service increase.

Longevity increases hereunder shall be conditioned upon continuous faithful service and good conduct.

7. Upon motion of Commissioner Blackburn, it was

Resolved, That the regulations respecting the sale of intoxicating liquors in the Canal Zone, approved at the one hundred and twenty-fifth meeting of the Commission, held April 27, 1907, be, and the same are hereby, amended, by inserting at the end of section 11, as a part thereof, the following:

This section is not intended to prevent the proprietor of any hotel or restaurant, holding a license for the sale of liquor in a room in the same building with such hotel or restaurant, from serving to guests in the dining room of such hotel or restaurant, with bona fide meals, liquors sold at his bar in the same building.

8. The following regulations in regard to longevity increases in pay, which were made effective May 1, 1907, under instructions of the

Secretary of War, and with the approval of the President, were adopted:

(a) All employees not native to the tropics, who occupy the positions herein designated, shall be granted the following increases in pay for length of continuous service on the Isthmus:

Five per cent of the basic or class rate for the second year, with a cumulative addition of 3 per cent of the basic rate for each subsequent year; provided, however, that such cumulative increase shall not exceed a total of 25 per cent of the basic rate.

(b) The positions to which these regulations apply are as follows:

Boilermakers
Blacksmiths
Bricklayers
Car Repairers
Carpenters
Cabinet Makers
Coppersmiths
Channelers
Captains of Barges, Dredges, Tugs, and Launches
Drill Runners
Diamond Drill Setters
Engineers of Barges, Dredges, Tugs, and Launches
Firemen
Hostlers
Iron Workers
Locomotive Engineers
Masons
Millwrights
Molders
Machinists
Motormen
Patternmakers
Painters
Pipefitters
Plasterers
Plumbers
Planing Mill Machine Hands
Shipwrights
Steam Shovel Engineers
Steam Shovel Cranemen
Trainmen
Train Conductors
Tinsmiths
Well Drillers
Wiremen
Yardmasters.

(c) In the case of an employee transferred to the Commission from the Panama Railroad Company, his service on the Isthmus with the latter will be reckoned the same as service with the Commission.

(d) By "service" is meant all time on the Commission's rolls in any class of employment, from the date of entering the Isthmian service to the date of termination of same.

(e) The class rate may be changed at any time if circumstances arise justifying such action.

There being no further business before the Commission, the meeting adjourned at 4.15 p. m., subject to the call of the Chairman.

ONE HUNDRED AND THIRTY-SECOND MEETING.

CULEBRA, CANAL ZONE, *August 15, 1907.*

The Commission met at the call of the Chairman at 2 p. m.

Present: Commissioners Goethals (Chairman), Blackburn, Gorgas, Sibert, Gaillard, Rousseau, and Secretary Bishop.

Absent: Commissioner Smith.

1. By invitation, Judge H. A. Gudger appeared before the Commission and made a statement in support of his request that he be provided with a house at Ancon. As the senior associate justice, Judge Gudger stated that he was entitled to select Ancon as his

official station, and that he had taken up his residence at Empire only at the earnest solicitation of the Governor of the Canal Zone, with the understanding that if his location at that point did not prove agreeable to himself and family there would always be an opportunity to exchange his residence at Empire for a house at Ancon. He stated that on the strength of this understanding, and the statement of the Head of the Department of Labor, Quarters, and Subsistence, that his house at Empire could be reassigned without loss to the Commission, he had relinquished it and taken quarters at the Hotel Tivoli because of the ill health of his wife and also in order to have convenient access to legal works of reference which could be obtained only in Panama.

On motion, it was

Resolved, That in view of the fact that the house constructed for Judge Gudger at Empire had been reassigned to the Local Auditor, a type ten house (to which the Local Auditor would be entitled) be constructed for him at Ancon.

2. Commissioner Blackburn presented a revised draft, containing amendments submitted by the Government of Panama since June 7, of the agreement approved at the one hundred and twenty-eighth meeting of the Commission, held June 7, 1907, between the Canal Commission and the Panama Government, respecting water rates in the City of Panama.

The revised draft of the contract, as presented, was approved, and the Chairman was authorized to sign it on behalf of the Commission.

3. Commissioner Blackburn presented a draft of a contract to be entered into between the Commission and the Government of Panama, providing for reimbursement to the United States for the cost of installation and maintenance of the water and sewer systems, and construction and repair of pavements in Colon, effective July 1, 1907.

The draft of the contract, as presented, was approved, and the Chairman was authorized to sign it on behalf of the Commission.

4. Attention was called to the fact that under the regulations of the Commission an employee who resigns after two years' satisfactory service on the Isthmus is entitled to free transportation to the States, which costs the Commission $50 to San Francisco and $45 to New York. As a measure of economy, it was therefore

Resolved, That employees who resign while on a leave of absence may, with the approval of the Chairman, be paid for leave with pay granted them less one week without being required to return to the Isthmus, provided they shall have completed at least two years' service at the expiration of such leave.

5. The Chairman presented the case of T. A. Bryan, an employee of the Division of Building Construction, who was granted eighty-four days leave of absence with pay, effective April 1, 1907, and sixty

days without pay, it appearing from the report of the Medical Examining Board that Mr. Bryan was found to be suffering from tuberculosis prior to going on leave; it was

Resolved, That he be paid in the States for the eighty-four days' leave with pay granted him without being required to return to the Isthmus.

6. On motion it was

Resolved, That the allowance of furniture for families of employees receiving less than $400 per month, be fixed as follows:

1 range	1 refrigerator
1 double bed	1 double mattress
2 pillows	1 kitchen table
2 kitchen chairs	1 dining table
6 dining chairs	1 sideboard
1 chiffonier	1 dresser
2 center tables	1 bedroom mat
1 mosquito bar	3 wicker rockers.

That, for employees receiving $400 per month, or over, the following additional articles be authorized, and that same come up to specifications laid down for the former "C" class of furniture:

3 dining chairs	1 serving table
1 chiffonier	1 dresser
2 towel racks	1 bedroom mat
1 parlor desk	1 parlor wicker rocker
2 parlor chairs	1 morris chair
1 porch swing	1 porch double seat.

That the issue of beds, mattresses, and mosquito bars in excess of this allowance be authorized to families with children.

There being no further business before the Commission, the meeting was adjourned at 5 p. m., subject to the call of the Chairman.

ONE HUNDRED AND THIRTY-THIRD MEETING.

CULEBRA, CANAL ZONE, *August 31, 1907.*

The Commission met at the call of the Chairman at 2 p. m.

Present: Commissioners Goethals (Chairman), Blackburn, Gorgas, Sibert, Gaillard, Rousseau, Smith, and Secretary Bishop.

The minutes of the one hundred and thirty-first meeting were read and approved.

The minutes of the one hundred and thirty-second meeting were read and approved.

1. The Chairman presented the recommendation of the Head of the Department of Excavation and Dredging that Thomas C. Thompson, engineer of barge, be granted leave of absence with pay. It appears from the records that through an error Mr. Thompson was carried on

the rolls from February 8, 1907, to February 21, 1907, on an hourly basis, when prior and subsequent to those dates he had been borne on the monthly rolls, and there appears to be no authority for the change that was then made in his status. On motion, it was

Resolved, That his record be corrected to show him as having continuous service on a monthly basis since September 10, 1906, and that he be granted leave of absence with pay under the regulations of the Commission.

2. The Chairman presented a letter from the Chief Sanitary Officer, relating to paragraph 10 of the minutes of the one hundred and twenty-ninth meeting, concerning general conditions of employment, and recommended that the name of Dr. H. A. Lewis, Official Vaccinator in the Department of Sanitation, be added to the number of those employees to whom the provisions governing leave were extended, owing to the conditions surrounding their original employment. Inasmuch as Doctor Lewis's service in the Department has been continuous since 1904, upon motion, it was

Resolved, That the provisions covering leaves of absence be extended to Dr. H. A. Lewis.

3. The Chairman presented a statement showing appointments, promotions, and other changes in the personnel of the Washington Office and Assistant Purchasing Agencies, covering the period from January 1, 1907, to June 30, 1907, inclusive, all of which were ratified and approved.

4. The Chairman presented the recommendation of the Head of the Department of Excavation and Dredging that Panai Correndes, employed in the Colon Division as winchman, at the rate of $100 per month silver, be paid for thirty days' sick leave, on account of injury incurred in the line of duty prior to July 1, 1907. On motion, it was

Resolved, That payment to Panai Correndes for thirty days' meritorious sick leave is approved.

5. The Chairman presented a letter from the Head of the Department of Civil Administration, recommending that the reduced passenger rates on the ships of the Panama Railroad Steamship Company, from Colon to New York and return, now granted to Panamanian students desiring to enter schools and colleges in the United States, be also extended to the students of Peru. In respect to this matter the Secretary of War, in a letter to the Chairman of the Commission, dated May 8, 1907, has expressed the following opinion:

"Señor Pezet suggested the making of low rates for the transportation of Peruvian students over the Peruvian line by way of Panama and the Panama Railroad steamers, provided such students attend American schools, and pointed out the advantage that there was in having in Peru the influence of Peruvians educated in American schools, with a knowledge of American institutions, and with a predilection for Amer-

ican associations. I concur that this advantage is sufficient to justify a lowering of rates to Peruvian students who are shown by certificates to be coming to American schools, and any rule that the Commission may see fit to adopt in this regard will meet my approval.

On motion, it was

Resolved, That upon application duly certified by the consular or diplomatic representative of Peru at Panama or Colon, students of Peru above the age of 12 years desiring to enter schools and colleges in the United States will be furnished first-class tickets on the ships of the Panama Railroad Steamship Company from Colon to New York and return at the regular rate for one way.

6. The Chairman presented a letter addressed by the Secretary and Treasurer of the Empire Athletic Association to the Head of the Department of Civil Administration relative to subsection 2, under section "i" of section 7 of the regulations providing for certain taxes and licenses in the Canal Zone, approved May 17, 1907, which reads as follows:

SEC. 7 "i" (2). Minstrel, musical, variety, athletic, and all other similar shows or exhibitions given under canvas or within an enclosure, $5 for each performance or exhibition.

Under this section the Empire Athletic Association and other associations formed for the purpose of promoting baseball are required to pay a tax of $5 for each game of baseball played on their grounds. Inasmuch as it is the policy of the Commission to encourage healthful amusement and recreation for employees of the Commission, and as it is not desired to tax the individual efforts of employees in this direction, it was

Resolved, That subsection 2, under "i," of the regulations providing for certain taxes and licenses in the Canal Zone, other than for the sale of intoxicating liquors, be amended by striking out the word "athletic," so that as amended it will read as follows:

SEC. 7 "i" (2). Minstrel, musical, variety, and all other shows or exhibitions given under canvas or within an enclosure, $5 for each performance or exhibition.

7. The Chairman presented to the Commission the report of Miss Beeks, Secretary of the Welfare Department of the National Civic Federation, New York City, relative to her investigation of conditions of employment on the Isthmus of Panama. In order to carry out the wish of the Secretary of War, he requested that each member of the Commission carefully read the report and submit comments upon those portions relating to the work of his department.

8. The Secretary of the Commission presented a plan for an official newspaper, to be published weekly, under the authority and supervision of the Commission, to be called "The Canal Record," and to be issued free of charge, one copy each to all employees on the Gold Roll, additional copies to be bought at the Panama Railroad news

stands at 5 cents each. After consideration the plan was unanimously approved, and the Secretary was authorized to begin the publication of said newspaper on September 4.

There being no further business before the Commission, the Meeting was adjourned at 3.15 p. m., subject to call of the Chairman.

ONE HUNDRED AND THIRTY-FOURTH MEETING.

CULEBRA, CANAL ZONE, *September 25, 1907.*

The Commission met at the call of the Chairman at 2 o'clock p. m.

Present: Commissioners Goethals (Chairman), Blackburn, Gorgas, Sibert, Gaillard, Rousseau, Smith, and Secretary Bishop.

The minutes of the one hundred and thirty-third meeting were read and approved.

1. *Resolved*, That the position of stationary engineer be included among those positions to which the regulations governing longevity increase in pay apply, as adopted at the one hundred and thirty-first meeting of the Commission

2. *Resolved*, That paragraphs 4, 9, and 11 of the Building Regulations, approved by the Commission at its one hundred and thirtieth meeting, be changed to read as follows:

4. There shall be either a free space of not less than fifteen (15) feet between buildings, or else the walls shall be joined together with no intervening space: *Provided that no new building shall be erected in immediate juxtaposition to an existing building, except with the prior consent in writing of the owner of the existing building.* In this free space no outhouses, annexes, or verandas, steps nor staircases shall be built, and no material of any nature shall be stored therein. *On land held under lease from the Isthmian Canal Commission, and adjacent to a building the property of the Isthmian Canal Commission, no new building shall be constructed except at such distance from adjoining buildings of the Isthmian Canal Commission as may be prescribed by the Department of Sanitation.*

9. There shall be a free space of fifty (50) feet between the back of one house and that of another, when the houses face on different streets with back to back; provided that in special cases, to be determined by the Head of the Division of Municipal Engineering, they may adjoin. Furthermore, there shall not be built sheds, balconies, or annexes of any description, *except privies as provided in paragraph 11*, in this free space, and no material of any nature shall be stored between houses.

11. Attached to each house there shall be a fly-proof privy, *the front line of* which shall be located at a distance of not less than twenty (20) feet from the house. *There shall be a free space of four feet between the backs of privies.* This requirement shall not apply when sewer connections are made.

3. In view of certain circumstances surrounding the forfeiture (under section 17 of the regulations governing the sale of intoxicat-

ing liquors in the Canal Zone) of the liquor license, at Empire, held by Melchor R. Esquivel, and upon motion of the Head of the Department of Civil Administration, it was

Resolved, That the license issued to Melchor R. Esquivel, for the sale of liquors at retail, and forfeited under section 17 of the regulations, be renewed without the payment of an additional fee.

4. *Resolved*, That section 5 of the order of the Governor of the Canal Zone, promulgated January 18, 1906, and approved at the one hundred and thirteenth meeting of the Commission, held on July 9, 1906, amending the Rules and Regulations Governing the Sanitary Installation of Water and Sewers in the Cities of Panama and Colon, prescribed by the Executive Order of August 25, 1905, be amended to read as follows:

SEC. 5. All buildings that are now or may hereafter be erected, abutting on or adjacent to any street in which there is an accessible public sewer or water main, shall be connected with one or both thereof, as the case may be, and proper sanitary fixtures installed, in strict accordance with the terms and conditions of these "Rules and Regulations" (*the application for such installation having been first submitted to the Health Officer and by him approved*), upon written notice from the *Superintendent of Public Works*, unless permission to omit such connection and sanitary fixtures is specifically given in writing by the Chief Sanitary Officer of the Government of the Canal Zone, a copy of such permission being forwarded to the *Superintendent of Public Works* by the Chief Sanitary Officer. Where permission is not given in writing to omit such connections with sewer or water main, or both, and such sanitary fixtures, as above provided, the owner or representative of the owner of said premises must comply with the written order of the *Superintendent of Public Works* and make said connections, and install proper sanitary fixtures, in strict accordance with the terms and conditions of these "Rules and Regulations," within *thirty* days from the receipt of such written notice from the *Superintendent of Public Works;* and in the event that said owner, or representative of said owner, fails, neglects, or refuses to comply with the said written notice, it shall be lawful for the *Superintendent of Public Works* to make such connections and install said sanitary fixtures, in accordance with the terms and conditions of these "Rules and Regulations," and the entire expense incurred thereby shall be chargeable against said property, become a lien thereon, and be collected in the manner in which water rents are collected. Every building used as a dwelling house shall have at least one water-closet for each family, *also one sink and one bath.* In a tenement, lodging house, or hotel there must be at least one water-closet for *every* fifteen persons, *and one bath for every twenty-five persons. No permit will be issued to occupy a house or to renew the lease on a lot until the above sanitary requirements have been complied with.*

5. The Chairman presented the recommendation of the Advisory Committee of the Young Men's Christian Association of the Canal Zone for the appointment of two additional Secretaries of Club Houses, capable of conducting gymnastics. It being considered desirable that one Assistant Secretary should be stationed at each of the four organized points, on motion, it was

Resolved, That two additional Assistant Secretaries of Club Houses, capable of conducting gymnastics, be appointed at $125 per month.

The Chairman was also authorized to have the following work performed:

Installation of barber equipment in the Club Houses at Empire, Gorgona, and Cristobal.

Construction of bleacher seats at the rear of the run way of the bowling alleys in each of the four Club Houses.

6. Upon motion, it was

Resolved, That band stands be erected at Las Cascadas, Empire, Bas Obispo, Paraiso, Ancon, and Cristobal.

7. Circular No. 20 of the Isthmian Canal Commission, dated January 1, 1906, provides expenses which will be allowed employees of the Commission when traveling in the United States, and Circular No. 21 of the Isthmian Canal Commission, dated January 1, 1906, provides expenses which will be allowed persons traveling in the United States on business of the Commission, whose services have been secured through contract or agreement.

It appearing that Inspectors employed by the Panama Railroad Company or the Isthmian Canal Commission have been held to be subject to the terms of Circular No. 21; and it appearing further that these Inspectors are in the joint employ of the Panama Railroad Company and the Isthmian Canal Commission, at the direction of the latter as a matter of expediency and routine in the prompt and efficient inspection and forwarding of supplies purchased for the construction of the Canal; on motion, it was

Resolved, That the Inspectors in the force of the Inspecting Engineer, in the joint employ of the Panama Railroad Company and the Isthmian Canal Commission, are entitled to and shall be given the travel allowances enumerated in Circular No. 20, when traveling on business of the Commission.

8. Whereas, it appears from statistics prepared by the officers that the monthly amount of transportation on the Panama Railroad furnished to officials and employees of the Isthmian Canal Commission on the Isthmus at one-half the regular passenger rates exceed the sum of $11,000, authorized by resolution of the Commission at its one hundred and twenty-ninth meeting, held June 11, 1907; therefore, be it

Resolved, That beginning September 1, 1907, and thereafter until statistics again warrant change, the lump sum of $12,000 per month be paid by the Commission for the transportation of their officials and employees on the regular scheduled trains of the Panama Railroad Company: *Provided, however*, That said lump-sum allowance per month shall not include the railroad company's proportion of the rate from New York to Panama on through business; but, on the contrary, that, as formerly, the sum of $1.20 per passenger shall be allowed and paid for the transportation of the Commission's employees en route from New York to Panama.

9. *Resolved*, That during the absence of the General Purchasing Officer of the Commission from Washington, the Acting General Purchasing Officer be authorized to sign all contracts on behalf of the Commission for the purchase of materials and supplies; and further

Resolved, That the action of the Acting General Purchasing Officer heretofore in executing such contracts on behalf of the Commission be, and the same is hereby, ratified and approved.

There being no further business before the Commission, the meeting was adjourned at 4.10 p. m., subject to call of the Chairman.

ONE HUNDRED AND THIRTY-FIFTH MEETING.

CULEBRA, CANAL ZONE, *October 5, 1907.*

The Commission met at the call of the Chairman at 2 p. m.

Present: Commissioners Goethals (Chairman), Blackburn, Gorgas, Gaillard, Rousseau, Smith, and Secretary Bishop.

Absent: Commissioner Sibert.

The minutes of the one hundred and thirty-fourth meeting were read and approved.

1. In view of the large number of applications for family quarters now pending, upon motion, it was

Resolved, That it will be impracticable hereafter to provide other than bachelor quarters for employees who have been hired on the Isthmus and who are not citizens of the United States.

2. The Chairman submitted the question whether the Commission would authorize the construction of a house at Culebra to be used as a residence for four women school-teachers, and upon motion, it was

Resolved, That it is not deemed expedient to provide special quarters for any class of employees, with the exception of members of the fire department and of certain employees of the postal service, the nature of whose duties requires that such accommodations be furnished.

3. The Chairman presented the report of the board appointed by the Chief Sanitary Officer to investigate the causes of pneumonia on the Canal Zone, in which report it is recommended that each newly arrived laborer be furnished two suits of underclothing and two blankets. In accordance with these recommendations, it was the sense of the meeting that each laborer, upon his arrival, should be advised of the importance of being provided with necessary underclothing and blankets, notices to this effect to be conspicuously posted.

4. The Chairman presented the case of Antonio N. Gonzales, check

No. 79811, who was injured by a premature blast on June 5, 1907, and recommended that he be paid for thirty days' sick leave on account of injury incurred in line of duty. Upon motion, it was

Resolved, That payment to Antonio N. Gonzales for thirty days' meritorious sick leave is approved.

5. Upon motion, it was

Resolved, That the provisions covering sick leave on account of injury incurred in the performance of duty, adopted at the one hundred and twenty ninth meeting of the Commission, should be applied as follows:

For employees on both the gold and silver rolls, including laborers, the amount of compensation in such cases shall be calculated on the basis of an eight-hour day for consecutive days, including Sundays and holidays, no charge to be made for subsistence while at the hospital; provided, that before payment is made to any laborer who may be indebted to the Commission for transportation to the Isthmus, the usual deductions on that account shall be made from the amount due him.

There being no further business before the Commission, the meeting was adjourned at 3.25 p. m., subject to call of Chairman.

ONE HUNDRED AND THIRTY-SIXTH MEETING.

CULEBRA, CANAL ZONE, *October 28, 1907.*

The Commission met at the call of the Chairman at 2 p. m.

Present: Commissioners Goethals (Chairman), Blackburn, Gorgas, Gaillard, Smith, and Secretary Bishop.

Absent: Commissioners Sibert and Rousseau.

The minutes of the one hundred and thirty-fifth meeting of the Commission were read and approved.

1. Upon motion, it was

Resolved, That the regulations governing the treatment of persons by the physicians and in the hospitals of the Health Department of the Government of the Canal Zone, as adopted at the one hundred and twenty-fourth meeting of the Isthmian Canal Commission, held at Culebra, April 24, 1907, be amended by the addition of the following paragraph:

The officers and men of the United States Marine Corps, stationed for duty on the Canal Zone, shall be treated in all respects upon the same basis as employees of the Isthmian Canal Commission, and the members of their families may be admitted to hospitals and treated at dispensaries on the same basis as members of families of employees of the Isthmian Canal Commission.

2. The Chairman presented statements showing the appointments, promotions, and other changes in the personnel:

(*a*) In the Department of Construction and Engineering for the weeks ending May 18 and 25; June 1, 8, 15, 22, and 29; July 6, 13, 20, and 27; August 3, 10, 17, 24, and 31; September 7, 14, 21, and 28; October 5, 12, and 19.

(*b*) In the Department of Labor, Quarters and Subsistence for the weeks ending May 18 and 25, June 1, 8, 15, 22, and 29, July 6, 13, 20, and 27, August 3, 10, 17, 24, and 31, September 7, 14, 21, and 28, October 5, 12, and 19.

(*c*) In the Department of Sanitation for the weeks ending May 18 and 25, June 1, 8, 15, 22, and 29, July 6, 13, 20, and 27, August 3, 10, 17, 24, and 31, September 7, 14, 21, and 28, October 5, 12, and 19.

(*d*) In the Department of Civil Administration for the weeks ending May 18 and 25, June 1, 8, 15, 22, and 29, July 6, 13, 20, and 27, August 3, 10, 17, 24, and 31, September 7, 14, 21, and 28, October 5, 12, and 19.

(*e*) In the Department of Disbursements for the weeks ending May 18 and 25, June 1, 8, 15, 22, and 29, July 6, 13, 20, and 27, August 3, 10, 17, 24, and 31, September 7, 14, 21, and 28, October 5, 12, and 19.

(*f*) In the Department of Auditing for the weeks ending May 18 and 25, June 1, 8, 15, 22, and 29, July 6, 13, 20, and 27, August 3, 10, and 17.

(*g*) In the Office of the Examiner of Accounts for the weeks ending August 24 and 31, September 7, 14, 21, and 28, October 5, 12, and 19.

(*h*) In the Isthmian Canal Commission Band for the weeks ending September 28, October 5 and 19.

All of which were ratified and approved.

3. The Chairman presented an Executive Order, approving, in a slightly modified form, the resolution of the Commission adopted at a meeting held at Culebra, September 25, 1907, amending Section 5 of the Rules and Regulations Governing the Sanitary Installation of Water and Sewers in the Cities of Panama and Colon.

The Executive Order is as follows:

EXECUTIVE ORDER.

By direction of the President, it is ordered:

The resolution of the Isthmian Canal Commission adopted at a meeting held at Culebra, September 25, 1907, amending Section 5 of the Rules and Regulations Governing the Sanitary Installation of Water and Sewers in the Cities of Panama and Colon, Republic of Panama, approved at the one hundred and thirteenth meeting of the Isthmian Canal Commission, held July 9, 1906, is hereby approved in the form following:

SEC. 5. All buildings that are now or may hereafter be erected, abutting on or adjacent to any street in which there is an accessible public sewer or water main, shall be connected with one or both thereof, as the case may be, and proper sanitary fixtures installed, in strict accordance with the terms and conditions of these "Rules and Regulations," upon written notice from the Superintendent of Public Works, unless permission to omit such connection and sanitary fixtures is specifically given in writing by the Chief Sanitary Officer of the Government of the Canal Zone, a copy of such permission being forwarded to the Superintendent of Public Works by the Chief Sanitary Officer. Where permission is not given in writing to omit such connections with sewer or water main, or both, and such sanitary fixtures as above provided, the owner or representative of the owner of said premises must comply with the written order

of the Superintendent of Public Works and make said connections, and install proper sanitary fixtures, in strict accordance with the terms and conditions of these "Rules and Regulations" within thirty days from the receipt of such written notice from the Superintendent of Public Works; and in the event that said owner or representative of said owner fails, neglects, or refuses to comply with the said written notice, it shall be lawful for the Superintendent of Public Works to make such connections and install said sanitary fixtures, in accordance with the terms and conditions of these "Rules and Regulations," and the entire expense incurred thereby shall be chargeable against said property, become a lien thereon, and be collected in the manner in which water rents are collected. Every building used as a dwelling house shall have at least one water-closet for each family, also one sink and one bath. In a tenement, lodging-house, or hotel, there must be at least one water-closet for every 15 persons and one bath for every 25 persons. All applications for the installation of water fixtures or for making sewer connections shall be first submitted to the Health Officer and by him approved.

ROBERT SHAW OLIVER,
Acting Secretary of War.

WAR DEPARTMENT,
Washington, D. C., October 16, 1907.

4. Whereas it appears, from statistics prepared by the officers, that the amount of transportation on the Panama Railroad furnished to officials and employees of the Isthmian Canal Commission on the Isthmus at one-half the regular passenger rates exceeds the lump sum of $12,000 authorized by resolution of the Commission at its one hundred and thirty-fourth meeting, held September 25, 1907: therefore be it

Resolved, That beginning with the month of October, 1907, and thereafter until statistics again warrant change, the lump sum of $13,000 per month be paid by the Commission for the transportation of their officials and employees on the regular scheduled trains of the Panama Railroad Company: *Provided, however*, That such lump-sum allowance per month shall not include the Railroad Company's proportion of the rate from New York to Panama on through business, but, on the contrary, that, as formerly, the sum of $1.20 per passenger shall be allowed and paid for the transportation of the Commission's employees en route from New York to Panama.

5. The following Rates, Rules and Regulations Governing the use of water on the Canal Zone were read and approved:

Be it resolved, under authority of section 7 of the Executive Order of the President of the United States dated March 13, 1907, wherein it is provided that "ordinances regulating police, sanitation, and taxation, and other matters now regulated by ordinance, may be enacted, and existing ordinances may be repealed, by the Isthmian Canal Commission, with the approval of the Secretary of War," that the following regulations governing private connections with the public water mains and sewers in the Canal Zone and establishing rates to be collected on account of such private connections, be adopted by the Isthmian Canal Commission and submitted to the Secretary of War for his approval:

SECTION 1. Applications for the connection of private buildings with the public water mains or sewers shall be made to the Superintendent of Public Works, Ancon, Canal Zone. All such applications, whether submitted on blank forms

provided for that purpose or by letter, shall be construed to have the effect of contracts for the use of water from the public mains, and of the public sewer system, subject to the conditions hereinafter stipulated, and binding upon the owner or lessee of the premises referred to in the application.

SEC. 2. For each ¾-inch water tap, and for each standard 4-inch, 6-inch, or 8-inch sewer "Y" tap, a charge of $5 United States currency will be collected; said amount must be forwarded to the Superintendent of Public Works with the application for connection. The Superintendent of Public Works shall not do plumbing or pipe fitting for private individuals or companies within the Canal Zone; but to facilitate the use of water for sanitary purposes, the Superintendent of Public Works may undertake the laying of water or sewer pipe connecting the water mains or sewers with privately owned buildings, if it shall appear that the owner is unable to procure this work done in any other manner. When water or sewer pipe is laid, under these circumstances, by the Superintendent of Public Works for a private individual or company, a cash deposit shall be required, to cover the estimated cost of labor and material, plus 20 per cent, payable at the time application for the work is made.

SEC. 3. A contract may be terminated by the owner or lessee of a building, or by the agent of the owner or lessee, at the end of any calendar month, but all contracts shall continue in force, from month to month, unless notice of termination is given the Superintendent of Public Works, in writing, by the owner or lessee, or by the agent of the owner or lessee. Such notice of the termination of a contract must be accompanied with sufficient cash to cover any sum due for the connection. If the owner or lessee of a building shall request that the water delivered to his premises be shut off, and that his contract be terminated, at any time between the first and the last day of a calendar month, he shall, nevertheless, be liable for the full monthly rate for the connection during the month in which the water is shut off.

SEC. 4. Charge shall be made for all connections with the water mains and sewers in accordance with the schedule contained in section 2 of these regulations. Should the owner or lessee of a building having water connection refuse or neglect to pay his water bill for a period of forty-five days after the expiration of the quarter for which bill is rendered, this fact shall be reported to the Head of the Department of Civil Administration, who shall collect the bill by due process of law. All charges for water and all costs of collection shall be assessed against the building or property where the water was used, and become a lien thereon. When a bill for water becomes delinquent the water shall be turned off from the connection against which the bill is rendered, and no water shall be delivered through the connection until the bill is paid.

SEC. 5. The Superintendent of Public Works shall have authority to place a meter on any water connection, without notice to the owner or lessee, and to render bill for the actual quantity of water consumed, as shown by the meter, at the rates prescribed in section 11 of these regulations, in lieu of the fixed monthly charge for each faucet or fixture. Should the owner or lessee of any premises having water connection prefer to pay by meter rates for water consumed, meters will be provided and installed by the Superintendent of Public Works, at the expense of the owner or lessee.

SEC. 6. Bills for water shall be due on March 1, June 1, September 1, and December 1 of each year for the preceding quarter, and shall be payable at the office of the Tax Collector in the district in which the premises are located.

SEC. 7. The Isthmian Canal Commission reserves the right to shut off the water in any main, upon notice, for the purpose of making extensions or repairs,

or to shut off the water without notice whenever the exigencies of the service may require. Neither the Isthmian Canal Commission, the Government of the Canal Zone, or the United States, nor their agents, officers, or employees, shall be liable for any damage caused by any failure to deliver water or for any interruption of the sewer service, whether such failure or interruption results from natural disturbances, the bursting of pipes or fixtures, or from any other cause; nor shall they be liable for any injury for damage resulting to any person or property in any manner from the use of the waterworks or sewers.

SEC. 8. Persons using water from the public mains shall keep all pipes and fixtures within their premises in good condition and repair. The Superintendent of Public Works shall be authorized, whenever he shall find a fixture or pipe leaking or in an unsanitary condition, thereby causing waste or a collection of filth, to require the owner or occupant of the premises, by written notice, to place his plumbing in sanitary condition within a period of four days. If, at the expiration of this period, the conditions referred to in the notice have not been remedied, the Superintendent of Public Works shall be authorized to repair the fixture or pipe, and the cost of such repairs shall be charged to the owner or occupant of the premises, and shall be collected in the same manner as the water rent.

SEC. 9. The installation of plumbing within all buildings owned or leased by private parties in the Canal Zone shall be made in compliance with sections 4, 5, 6, 7, 8, 9, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31 of the Rules and Regulations Governing the Sanitary Installation of Plumbing in the cities of Panama and Colon.

SEC. 10. No person, or persons, shall remove, obstruct, injure, molest, or otherwise tamper with any fire hydrant, standpipe, fire plug, tank, hand grenade, fire extinguisher, hose, hose reel, cart, engine, harness, valve, box or cover, stopcock, stop box or cover, or any other tool, fixture, apparatus, pump, machinery, or building of any kind whatsoever connected with, or necessary to, the proper and efficient operation of the water systems or for fire protection within the Canal Zone; nor shall any person, or persons, willfully or otherwise, misuse or waste, or cause to be misused or wasted, water supplied from the water mains owned and operated by the Isthmian Canal Commission and the Government of the Canal Zone. Any person, or persons, violating any provision of this section shall be deemed guilty of a misdemeanor, and upon conviction shall be punishable by a fine of not less than $5 nor more than $25, or by imprisonment for a term not exceeding thirty days, or by both such fine and imprisonment: *Provided, however*, That the provisions of this section shall not apply to firemen in the regular discharge of their duties and duly authorized representatives of the Division of Municipal Engineering.

SEC. 11. The following rates shall be collected for the use of water drawn from the public mains in the Canal Zone through private connections:

	Per month.
Dwelling houses:	
For any number of persons not exceeding seven, one faucet	$1.50
For each additional seven persons, or smaller number	.75
Canteens or restaurants: One faucet	3.00
Bars: One faucet	4.50
Smaller hotels and boarding houses:	
With not more than 10 rooms, two faucets	4.50
For each room in addition to 10	.45
Bakeries:	
With average consumption of not more than two barrels of flour per day, one faucet	1.50
For average consumption of each additional barrel of flour per day	.45

	Per month.
Saloons for sale of ice cream and nonintoxicating beverages; barber shops, drug stores, stores (general), and blacksmith shops:	
One faucet	1.50
For each faucet or fixture in addition to those provided for above	1.50

The above flat rates are subject to a discount of 33⅓ per cent if paid within fifteen days from date of bill.

Bottling establishments, large hotels, large laundries, markets, stables, truck gardens: By meter.

When it shall be deemed proper or necessary to put in a meter, in accordance with section 5 of these regulations, the following rate will be charged for Cristobal, Gorgona, and Empire, provided that water furnished the Panama Railroad Company shall be charged for as provided in the special contract between the Railroad Company and the Isthmian Canal Commission:

A rate of 60 cents per thousand gallons, or any fraction thereof, including and above 500 gallons. Minimum rate per quarter $6, for which 10,000 gallons may be used.

A discount of 20 cents per thousand gallons will be allowed if payment is made within fifteen days from date of bill.

When it shall be deemed proper or necessary to put in a meter in accordance with section 5, the following rate will be charged for Ancon:

A rate of 20 cents per thousand gallons, or any fraction thereof, including and above 500 gallons. Minimum rate per quarter $2, for which 10,000 gallons may be used.

A discount of 5 cents per thousand gallons will be allowed if payment is made within fifteen days from date of bill.

All charges herein specified are expressed in terms of United States Currency.

Rates for the use of water for purposes not enumerated in the schedule, and for all special purposes, shall be fixed and determined by the Superintendent of Public Works, with the approval of the Head of the Department of Civil Administration, except that for public taps and for fire protection. Within the Administrative Districts the rates shall be determined by a board composed of a representative of the Collector of Revenues, the Superintendent of Public Works, and the Division of Municipal Engineering, which shall establish such rates at least once each year.

SEC. 12. All previous enactments in conflict with these rules and regulations are hereby repealed.

There being no further business before the Commission, the meeting was adjourned at 3.10 p. m., subject to the call of the Chairman.

ONE HUNDRED AND THIRTY-SEVENTH MEETING.

CULEBRA, CANAL ZONE, *December 7, 1907.*

The Commission met at the call of the Chairman at 2 p. m.

Present: Commissioners Goethals (Chairman), Gaillard, Sibert, Rousseau, Blackburn, and Smith.

Absent: Commissioner Gorgas.

The Commission elected the Chairman's Secretary, Mr. W. H. May, as Acting Secretary of the Commission for the meeting.

The minutes of the one hundred and thirty-sixth meeting of the Commission were read and approved.

1. Upon motion, it was

Resolved, That in all cases where the Panama Railroad Company has leased wharves, buildings, or structures belonging to the Isthmian Canal Commission under an agreement to repair the same, that the Panama Railroad Company shall not be liable to restore the premises in their original condition in the event of their destruction by action of the elements.

Resolved, further, That all contracts pending between the Panama Railroad Company and the Isthmian Canal Commission containing covenants to repair be, and the same are hereby, amended to conform with this resolution.

2. In view of the small size of the volume containing the minutes of meetings of the Commission for the quarter ended June 30, 1907, upon motion, it was

Resolved, That beginning July 1, 1907, the minutes of the meetings of the Isthmian Canal Commission shall be bound semiannually.

3. Upon motion, it was

Resolved, That the General Conditions of Employment, adopted at the one hundred and twenty-ninth meeting of the Isthmian Canal Commission and effective July 1, 1907, be amended as follows:

That paragraph 7 be changed to read as follows and inserted as paragraph 4:

Where practicable and in the best interests of the service, an employee will be provided with such bachelor quarters on the Isthmus as may be available from time to time. No agent of the Isthmian Canal Commission is authorized or empowered to promise family quarters to employees, and notice is particularly called to the fact that the supplying of family quarters is not a condition of employment.

That paragraph 4 be changed to read as follows and inserted as paragraph 5:

When the exigencies of the steamship service permit, members of the immediate family of an employee who has quarters will be granted, upon request, the Government rate on the steamers of the Panama Railroad Company operating between the United States and Cristobal. No charge will be made for children under six years of age, and half rates will be charged for children between the

ages of six and twelve years. The reduced rate *may* be granted to the family of any employee at the discretion of the Chairman, but the granting of the rate will not carry with it an obligation to furnish quarters.

That paragraphs 5 and 6 appear as paragraphs 6 and 7, respectively.

4. Upon motion of the Head of the Department of Civil Administration, it was

Resolved, That Mr. Tracy Snail, the holder of a liquor license at Gorgona, be permitted to remove his saloon from the building in which it is now located to a building fronting upon the main street of the native town of Gorgona, and on the block opposite the saloon of I. L. Maduro.

5. The Chairman read a communication from the Secretary of Foreign Affairs of the Republic of Panama, stating that the business of the merchants of Panama and Colon had been seriously affected by the extension of commissary privileges in the Canal Zone, and specifying the following measures which he considered necessary to remedy the conditions complained of:

1. Withdrawal of Resolution No. 17 of August 2, 1905, of the Canal Commission, and strict compliance with Executive Order of January 7 of that year, and exclusion from the commissary benefits of all the laborers of the Canal or of the Railroad, no matter what their nationality may be, thus doing away with objectionable distinctions, and because such was the spirit of the said Order, since at that time only such laborers were working on the Zone as were of tropical origin.

2. Regulations of the use of the commissary benefits by means of requisitions made by persons being entitled to do so, which should be checked by the respective Heads of Departments or administrative sections of the Commission or of the Railroad, to avoid the abuse that is being indulged in by the unrestricted use of the coupons.

3. Limiting the articles carried in stock by the commissaries to such as are products of the United States (final portion of clause 2 of the Executive Order of January 7, above referred to) and excluding such as are not strictly intended for the common necessities of domestic consumption.

4. Resumption of the short-term pay of the laborers of the Canal and the Railroad.

He also read a communication presented to him by a committee appointed by the merchants of Panama and Colon at mass meetings held on Sunday, December 1, recommending similar remedial measures to those specified by the Secretary of Foreign Affairs, as follows:

First. That, inasmuch as the extension of the Commissary privileges granted on August 2, 1905, to all those engaged in the employ or service of the Isthmian Canal Commission and Panama Railroad, was only of a temporary character and to remain effective only until such time as local supplies were sufficiently abundant to bring about reasonableness in prices, and as ample supplies at reasonable prices are held by the merchants to-day, it is respectfully suggested that the above-mentioned extension be rendered null and void, and that Executive Order dated January 7, 1905, published by the Secretary of War and by the direction of the President of the United States (see Exhibit B) be

forthwith enforced, both as to the restrictions of the privileges of the Commissaries and as to the importation of United States products alone.

It is also respectfully suggested, in connection with the above-mentioned Executive Order, that the privileges of the Commissaries be granted, not only to those who are citizens of the United States or who receive their compensation on what is known as the "Gold Pay Roll" of the Isthmian Canal Commission or the Panama Railroad, but also to all officials and employees, irrespective of nationality or of the pay roll on which they figure, and that there only be excluded from Commissary benefits, as was the original intention, all workmen and laborers, who, inasmuch as they are now fed by the Isthmian Canal Commission and Panama Railroad, have no need of making purchases in Government stores.

It is also further respectfully recommended that *all* the articles allowed to be sold in the Commissaries be specifically enumerated. It is not thought that there can be any trouble in doing this at the present time, owing to the considerable experience which has been acquired in attending to the wants of employees and officials.

Second. As, if these recommendations be adopted, the Commissaries will only be made use of by officials and employees, it is respectfully recommended that when an official or employee requires to purchase goods from the Commissaries, he shall forward a requisition to the Chief of his Department, who shall, in his discretion, approve or disapprove same. It is not known whether the coupon system would facilitate any such operations; but, if so, it may be found practicable to attach to each approved requisition coupons for the exact value of the requisition. Owing to the clearness with which the Panama Railroad Commissary price lists are published, and the frequency with which they are circulated, there could never be experienced any difficulty in arriving at said exact amount. It is thought that this would throw safeguards around the issue of coupons which do not exist to-day, and would prevent those who are not entitled to the privileges of the Commissary from receiving same.

Third. That the former system of paying labor twice a month instead of once a month, be again put in force. It is said that this change—which has been fatal to the mercantile interests in the Republic of Panama—was put into effect on the grounds of economy; without being fully cognizant of the matter, and without in any way wishing to interfere in work which does not pertain to outsiders, it is respectfully submitted that much more will be saved, in clerical and accounting work and printing, by the nonissuance of coupon books to laborers than could ever be economized by having one pay period a month instead of two.

After discussion, the Chairman was authorized to appoint a member of the Commission to confer with the representatives of the merchants of Panama and Colon relative to the measures recommended, with the exception of a return to semimonthly payments. In view of the economies effected, the Commission decided it was inadvisable to reestablish the former system. The Chairman appointed Mr. Jackson Smith, member of the Commission, and Head of the Department of Labor, Quarters, and Subsistence, to represent the Commission in these investigations and conferences, with Mr. H. J. Slifer, Manager of the Panama Railroad Company, as his associate; this committee to report recommendations to the Commission at a subsequent meeting.

6. The Chairman and Chief Engineer read the following letter,

addressed by him to the Secretary of War, recommending certain changes in the adopted project for the location and general arrangement of the locks and dams at the southern terminus of the Canal:

CULEBRA, CANAL ZONE, *December 9, 1907.*

HON. WM. H. TAFT,

Secretary of War, Washington, D. C.

SIR: The adopted plan for the building of the Panama Canal contemplates the formation of a lake on the Pacific side by the construction of three earth dams (Sosa-Corozal, Sosa-San Juan and Corozal-Diablo), the differences of level between the lake and the Pacific being overcome by a flight of two locks projecting into the Pacific on the west side of Sosa Hill.

The Board of Consulting Engineers that accompanied you to the Isthmus in April last inspected the sites of the dams, as finally located, with the view to outlining a detailed description of the preparation of the foundations for the structures to be erected, reporting thereon as follows:

"The borings showed so-called mud in the swampy portion, having a depth of 8 or 10 feet. This material is firmer than we had expected, and at the time of our visit, about two days after it had been flooded by spring tides, it could be walked on in most places. * * *

"For the dam construction * * * we do not think it will be necessary to remove the soft material at either of these places (Sosa-Corozal, Sosa-San Juan). The very softest material will either be displaced or consolidated by the material disposed on it. We do not think the amount displaced beneath the impervious portion of the embankment will be great, and if compressed in place, the material will be impervious."

As regards the character of the material that should compose the body of the structures, the same Board reported:

"For the Sosa-Corozal and La Boca dams the bottom width of the impervious portion should not be less than would result from a top width of 80 to 100 feet at 15 to 20 feet above the water level in the lake, with slopes not steeper than 1 on 4 to 1 on 5. The resulting width at sea level would be 640 feet or more. The comparatively small cross section suggested for the impervious portion of each of the Pacific dams is permissible only if it is reenforced by wide and heavy rock embankments on both sides. * * * On account of the nature of the bottom on which this rock fill will be deposited for the dams on the Pacific side, it should extend a long distance outside of the impervious portion in accordance with the principle adopted for the La Boca dam by the minority of the Board of Consulting Engineers in 1905-6, of spreading the base on soft bottoms so that the change in weight imposed on the foundations from the toe towards the crown will be gradual. This protection at the Sosa-Corozal and La Boca dams may be given great width with economy since they will afford convenient dumps for the Culebra material."

To construct the dams in accordance with these views, trestles were built along the toes of the Sosa-Corozal dam, from which to dump material from the Culebra Cut. The trestles failed, after the dumping of the material from them began, and the material overlying the rock moved laterally carrying the superimposed mass with it, the dumps flattening out until the side slopes were about 1 on 12 and even less. In places this lateral motion continued for two weeks after dumping had stopped. The ground on either side of and at some distance from the dump was forced up forming mounds of mud, the crests of which gradually approached the level of the top of the dump proper. After an equilibrium was established between the dump and the adjacent mounds, the

hump or wave would again move out when the track was shifted towards it, accompanied by a sudden vertical settling of the track of 6 to 10 feet when loaded trains were applied. It was thought that if the trestle were lower, better results might obtain, but with the west trestle only 8 feet above the surface of the ground and the piles driven to rock, similar failures followed.

When the difficulties on the east trestle developed, an investigation, by borings and test pits, was made to determine the character of the material overlying the rock. It was found to be for the greater part an unctuous blue clay without grit, possessing but little supporting power, instead of stiff clay as indicated on existing profiles.

Sheet No. 1, accompanying, indicates the effect that dumping produces on the ground adjacent to the dumps; sheet No. 2, the distribution of the underlying material; the photographs illustrate, to some extent, the effect on the trestles and the sudden settling of the dumps.

The investigations clearly demonstrate that the construction of dams which would remain in place after the lake is filled can be accomplished only by the removal of all material overlying the rock, and, after preparation of the rock surface, by building the dams of selected material. The depth to which the material will have to be removed is from 10 to 70 feet, and suitable material for dam construction will have to be transported to the site. Investigations of the foundations of the Sosa-San Juan dam show that the material is the same; the difficulties to be encountered will be greater because of the river.

It is estimated that the cost of building the two dams, following the plan that the investigations and work done indicate as necessary, will be about $11,573,800. The estimate submitted by the minority of the Board of Consulting Engineers for these dams is $4,314,000, a difference of $7,259,800.

As this difference to secure stability is excessive, an examination of the canal route from Pedro Miguel to the Pacific was undertaken to ascertain if more suitable places for the locks and dams could be found. In making these examinations care was taken to secure samples of the materials to be encountered at various depths and cores procured of the rock. A careful study was made of all data obtained and four possible projects present themselves for constructing that portion of the Canal extending from the south end of Culebra Cut to deep water in the Pacific Ocean.

First Project.—This is the present project and consists of one lock at Pedro Miguel and two at La Boca, with dams of suitable material on rock. The estimates submitted by the Board of Consulting Engineers are corrected to conform to methods, quantities, and unit prices that additional information and experience show will give more nearly the actual cost of the work. The project provides a 500-foot channel from Pedro Miguel to Miraflores, a 1,000-foot channel through Sosa Lake to La Boca, and a 500-foot channel from La Boca locks to deep water.

Second Project.—Two locks at Pedro Miguel and one at Miraflores, with a 500-foot channel through the lake from Pedro Miguel to Miraflores and a 500-foot channel from Miraflores to deep water in the Pacific Ocean.

Third Project.—One lock at Pedro Miguel and two at Miraflores with a 500-foot channel through the lake from Pedro Miguel to Miraflores and a 500-foot channel from Miraflores locks to deep water in the Pacific Ocean.

In this and in Project No. 2, provision is made for diverting the waters of the Rio Grande and the Corundi and the Cocoli Rivers, as well as for a channel of uniform width to the sea, having no connection with any other tidal basin; as a consequence the currents in the channel will result only from the tidal flow and will not attain a velocity as great as one foot a second, which will not interfere with navigation.

Fourth Project.—One lock at Pedro Miguel, one at Miraflores and one at La Boca, with 500-foot channels between locks and to deep water in the Pacific.

In each case locks and dams are on rock foundations. Blueprints of these various projects are herewith, with profiles showing the borings. Assuming that inverts are used, the total cost of the various projects are as follows:

Project No. 1	$58,395,540.00
Project No. 2	58,467,048.00
Project No. 3	50,927,268.00
Project No. 4	66,690,618.00

From the foregoing it is seen that Project No. 3, one lock at Pedro Miguel and two at Miraflores, is the most economical. It has the advantage over the present project in that the dams of lower height, less length, and resting on rock comparatively near the surface can be more easily constructed and completed at an earlier date. It is to be preferred to Project No. 1 by reason of the fact that the location of the locks secures them against all possibility of distant bombardment and affords them greater security against gunboat or torpedo boat attack.

The Commission unanimously recommends the adoption of Project No. 3 and its substitution for the existing project.

Very respectfully,

GEO. W. GOETHALS,
Chairman.

After consideration, it was unanimously

Resolved, That the project for the location and general arrangement of the locks and dams at the southern terminus of the Panama Canal, as submitted by the Chairman and Chief Engineer in his letter dated December 9, 1907, be, and the same is hereby, approved, subject to such modifications as may be deemed necessary during the prosecution of the work.

7. As the law requires that the locks of the Isthmian Canal shall be of such size "as will afford convenient passage of ships of the greatest tonnage and draft now in use and such as may be reasonably anticipated," and

As it is the opinion expressed by the General Board of the Navy, stated in a Memorandum to the Secretary of the Navy, dated Washington, October 29, 1907, "that the width of the locks as now fixed, namely, 100 feet, is insufficient for probable ships of future construction, and that sound policy would dictate an increase to a clear width of 110 feet,"

Upon motion, it was

Resolved, That the width of the locks be increased from 100 feet in the clear to 110 feet in the clear, in order to meet requirements of the Navy that can be reasonably expected in the near future.

There being no further busines before the Commission, the meeting was adjourned at 3.35 p. m., subject to the call of the Chairman.

ONE HUNDRED AND THIRTY-EIGHTH MEETING.

CULEBRA, CANAL ZONE, *December 9, 1907.*

The Commission met at the call of the Chairman at 11.30 a. m.

Present: Commissioners Goethals (chairman), Gaillard, Sibert, Rousseau, Gorgas, and Smith.

Absent: Commissioner Blackburn.

The Commission elected the Chairman's Secretary, Mr. W. H. May, as Acting Secretary of the Commission for the meeting.

1. Upon motion, the following ordinance to provide for the punishment of vagrancy, mendicancy, trespass, intoxication, and disorderly conduct in the Canal Zone was read and approved:

That Title XIV, of Act No. 14 of the Penal Code of the Laws of the Canal Zone be amended, effective January 15, 1908, by adding thereto the following section:

SECTION 293–A.

SUBSECTION 1. Every vagrant or person found within the Canal Zone without legitimate business or visible means of support; and

SUBSECTION 2. Every mendicant or habitual beggar found within the Canal Zone; and

SUBSECTION 3. Every person found within or loitering about any laborers' camp, mess house, quarters, or other Isthmian Canal Commission building, or any railroad car, or station, or other building of the Panama Railroad Company, or any dwelling or other building owned by any private person, without due and proper authority and permission so to be; or peddling goods or merchandise about any laborers' camp or mess house during hours when laborers are ordinarily employed at work, or in or about places where groups of men are at work; and

SUBSECTION 4. Every person found in the Canal Zone in an intoxicated condition or under the influence of liquor; and

SUBSECTION 5. Every person who shall, in the Canal Zone, engage in any kind of disorderly conduct or breach or disturbance of the peace shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed $25, or by imprisonment in jail not to exceed 30 days, or by both such fine and imprisonment.

There being no further business before the Commission, the meeting was adjourned at 11.40 a. m., subject to call of Chairman.

INDEX.

ABSENCE, LEAVE OF. See *Employees.* Page.
ACCOUNTS, EXAMINER OF:
Office of—
Personnel, changes in, approved 15
AUDITING, DEPARTMENT OF:
Personnel, changes in, approved 15
BAND:
Personnel, changes in, approved 15
Stands to be erected at certain towns 12
BEEKS, MISS GERTRUDE:
Report of, submitted to each Commissioner for comments 9
BISHOP, JOSEPH BUCKLIN:
Authorized to begin publication of The Canal Record on September 4, 1907. 9
BRYAN, T. A.:
Payment of leave of absence pay in United States authorized 6
BUILDINGS:
Construction of, authorized—
Ancon, residence at, for Judge H. A. Gudger 6
Regulations, paragraphs 4, 9, and 11 amended 10
CANAL, ISTHMIAN. See *Panama Canal.*
CANAL RECORD:
Distribution of 9
Publication of, approved 9
CANAL ZONE:
Laws of—
Penal Code amended to provide punishment for vagrancy, intoxication, etc 26
CARRIAGES. See *Vehicles.*
CIRCULARS:
Isthmian Canal Commission—
No. 20, travel allowances enumerated in, extended to Inspectors in Joint Inspecting Engineer's Office 12
CIVIC FEDERATION, NATIONAL. See *National Civic Federation.*
CIVIL ADMINISTRATION, DEPARTMENT OF:
Personnel, changes in, approved 15
Police Department. See *Police Department.*
CLUBS:
Appointment of two assistant secretaries for, authorized 4, 11
Construction of bleacher seats at rear of runway in bowling alleys authorized 12
Installation of barber equipment in certain, authorized 12
COLON CITY:
Paving in, contract to reimburse United States for cost of, approved 6
Sanitary installation of water and sewers in—
Rules governing—
Amended 11
Executive Order amending section 5 15

COMMISSARY: Page.
Extension of privileges of—
Complaints against—
Committee appointed to investigate 21
Measures recommended to remedy conditions 21
Merchants of Panama and Colon 21
Secretary of Foreign Affairs, Republic of Panama 21
CONDITIONS OF EMPLOYMENT. See *Employees.*
CONSTRUCTION AND ENGINEERING, DEPARTMENT OF:
Personnel, changes in, approved 15
CONTRACTS:
Between Panama Government and Canal Commission—
Approval of—
Providing for reimbursement to United States for cost of installation and maintenance of water and sewer systems and pavement of Colon 6
Water rates in City of Panama 6
Between Panama Railroad Company and Canal Commission—
Amendment of, providing that Panama Railroad Company need not restore docks, etc., leased from Commission if destroyed by elements, authorized 20
Material and supplies, purchase of—
Acting General Purchasing Officer authorized to sign, in absence of General Purchasing Officer 13
Action of Acting General Purchasing Officer heretofore in executing, approved 13
CORRENDES, PANAI:
Payment for thirty days' sick leave authorized 8
DEARBORN, F. M.:
Payment of leave of absence pay in United States authorized upon presentation of doctor's certificate 3
DEPARTMENT OF CONSTRUCTION AND ENGINEERING. See *Construction and Engineering, Department of.*
DEPARTMENT OF LABOR, QUARTERS, AND SUBSISTENCE. See *Labor, Quarters, and Subsistence, Department of.*
DEPARTMENT OF SANITATION. See *Sanitation, Department of.*
DISBURSEMENTS, DEPARTMENT OF:
Personnel, changes in, approved 15
EMPLOYEES:
Band. See *Bands.*
Clubs for. See *Clubs.*
Conditions of employment—
Quarters, bachelor and family, paragraph 7 providing for, changed 20
Transportation, paragraph 4, re furnishing Government rate to members of families, changed 20
Families of, allowance of furniture to, fixed 7
Leave of absence—
Annual—
Granted Thomas C. Thompson with pay 7
Payment in United States of salary for period of, authorized—
Bryan, T. A 7
Dearborn, F. M., upon presentation of doctor's certificate 3
Less one week upon resignation of employee after two years' service 6
Martin, W. A., up to September 15, 1907 3

EMPLOYEES—Continued. Page.
Leave of absence—Continued.
Provisions governing, extended to Dr. H. A. Lewis 8
Sick—
On account of injury, application of provisions covering 14
Payment for thirty days, granted Antonio N. Gonzales 14
Thirty days, granted Panai Correndes 8
Pay of—
Longevity increases in—
Regulations regarding—
Approved 4
Positions affected by 5
Stationary engineer to be included in 10
Personnel, changes in, approved 8, 15
Quarters—
Bachelor—
Not to be furnished non-American citizens engaged on Isthmus .. 13
To be provided when available 20
Family, supplying of, not a condition of employment 20
Special for school teachers, construction of, not deemed expedient 13
Recreation. See *Clubs* and *Bands*.
Teachers. See *Schools*.
Transportation—
Amount of monthly charge of Panama Railroad Company for, increased. 12, 16
Government rate furnished members of families when assigned quarters 20
EMPLOYMENT, CONDITIONS OF. See *Employees*.
ENGINEERING AND CONSTRUCTION, DEPARTMENT OF. See *Construction and Engineering, Department of*.
ENGINEER'S OFFICE, JOINT INSPECTING. See *Joint Inspecting Engineer's Office*.
ESQUIVAL, MELCHOR R.:
Renewal of liquor license to, authorized 11
EXAMINER OF ACCOUNTS. See *Accounts, Examiner of*.
EXECUTIVE ORDERS:
Secretary of War—
October 16, 1907—Amending section 5 of Rules Governing Sanitary Installation of Water and Sewers in Panama and Colon 15
FURNITURE:
Allowance of, to families of employees fixed 7
GOETHALS, LIEUT. COL. GEO. W.:
Letter of—
December 9, 1907, re changes in location of locks and dams 23
GONZALES, ANTONIO N.:
Payment of thirty days' meritorious sick leave approved 13
GUDGER, JUDGE H. A.:
Erection of house at Ancon for, authorized 6
HEALTH DEPARTMENT. See *Sanitation, Department of*.
HOSPITALS:
Treatment of persons in, rules governing amended 14
INSPECTING ENGINEER'S OFFICE, JOINT. See *Joint Inspecting Engineer's Office*.
ISTHMIAN CANAL. See *Panama Canal*.

ISTHMIAN CANAL COMMISSION: Page.
Auditing Department. See *Auditing Department.*
Chairman. See *Goethals, Lieut. Col. Geo. W.*
Chief Engineer. See *Goethals, Lieut. Col. Geo. W.*
Disbursing Department. See *Disbursing Department.*
Joint Inspecting Engineer's Office. See *Joint Inspecting Engineer's Office.*
Meetings, minutes of. See *Minutes.*
Official newspaper. See *Canal Record.*
Panama Railroad affairs. See *Panama Railroad Company.*
Purchasing Department. See *Purchasing Department.*
Secretary. See *Bishop, Joseph Bucklin.*
Washington Office. See *Washington Office.*
See also *Resolutions, Isthmian Canal Commission.*
JOINT INSPECTING ENGINEER'S OFFICE:
Inspectors in, travel allowances enumerated in Circular No. 20 extended to. 12
LABORERS:
To be advised on arrival of importance of being provided with necessary underclothing and blankets..... 13
Transportation, deduction from wages due on account of, not to be made in case of death from injury or disease contracted in line of duty..... 3
LABOR, QUARTERS, AND SUBSISTENCE, DEPARTMENT OF:
Personnel, changes in, approved..... 15
LEAVES OF ABSENCE. See *Employees.*
LEWIS, DR. H. A.:
Provisions covering leaves of absence extended to..... 8
LICENSES:
Liquor, renewal of, to Melchor R. Esquival authorized..... 11
Section 7 "i" (2) of regulations providing for certain, amended 9
LIQUOR:
Licenses. See *Licenses.*
Regulations governing sale of, amended..... 4
LOCKS. See *Panama Canal.*
MARINE CORPS, UNITED STATES:
Members of, and their families, treatment of, by physicians and in hospitals. 14
MARTIN, W. A.:
Payment of portion of leave of absence pay in United States authorized... 3
MATERIAL AND SUPPLIES:
Contracts for, signing of..... 13
MEETINGS. See *Minutes.*
MERCHANTS:
Panama and Colon—
Complaint of, against extension of commissary privileges and recommend remedial measures..... 21
MINUTES:
Isthmian Canal Commission—
One hundred and thirty-first meeting, Culebra, August 1, 1907..... 3
One hundred and thirty-second meeting, Culebra, August 15, 1907... 5
One hundred and thirty-third meeting, Culebra, August 31, 1907..... 7
One hundred and thirty-fourth meeting, Culebra, September 25, 1907.. 10
One hundred and thirty-fifth meeting, Culebra, October 5, 1907..... 13
One hundred and thirty-sixth meeting, Culebra, October 28, 1907.... 14
One hundred and thirty-seventh meeting, Culebra, December 7, 1907.. 20
One hundred and thirty-eighth meeting, Culebra, December 9, 1907.. 26
Printing of, in semiannual volumes, authorized..... 20

NATIONAL CIVIC FEDERATION: Page.
Welfare Department, Report of Secretary of, submitted to each Commissioner for comment 9
NEWSPAPER, OFFICIAL. See *Canal Record.*
ORDINANCE:
Providing punishment for vagrancy, intoxication, etc., approved 26
PANAMA CANAL:
Laborers. See *Laborers.*
Locks—
Increase in width of, approved 25
Southern terminus—
Locks and dams at, change in location of, approved 25
PANAMA CITY:
Sanitary installation of water and sewers in—
Rules governing—
Amended 11
Executive Order amending section 5 15
Water rates in, revised draft of contract with Panama Government approved 6
PANAMA RAILROAD COMPANY:
Commissary. See *Commissary.*
Contracts with Commission for leasing premises to be amended 20
Joint Inspecting Engineer's Office. See *Joint Inspecting Engineer's Office.*
Not liable to restore premises leased from Commission when destroyed by elements 20
Transportation—
Canal officials and employees, monthly charge for, increased 12, 16
Special rate to be granted Peruvian students 8
PANAMA, REPUBLIC OF:
Contracts. See *Contracts.*
Complaint of Secretary of Foreign Affairs re extension of commissary privileges 21
PAVING:
United States to be reimbursed for work done in Colon 6
PAY:
Longevity increases in—
Regulations regarding—
Approved 4
Positions affected 5
Stationary Engineer to be included in 10
PERU:
Students from, to be granted special transportation rate to United States and return 8
PHYSICIANS:
Rules governing treatment of persons by, amended 14
PNEUMONIA:
Recommendation of board appointed to investigate cause of 13
POLICE DEPARTMENT:
Schedule fixing pay of force adopted 4
PRINTING:
Minutes of Commission to be in semiannual volumes 20
PURCHASING AGENCIES, ASSISTANT:
Changes in personnel of, approved 8

PURCHASING DEPARTMENT: Page.
Acting head authorized to sign contracts ... 13
Signature heretofore of acting head to contracts approved ... 13
QUARTERS:
Employees. See *Employees.*
Family, supplying of, not a condition of employment ... 20
RECREATION. See *Clubs* and *Bands.*
REPUBLIC OF PANAMA. See *Panama, Republic of.*
RESIGNATIONS:
Payment of leave of absence pay in United States less one week upon receipt of, may be made ... 6
RESOLUTIONS:
Isthmian Canal Commission—
Bands, stands for to be erected in certain towns ... 12
Buildings—
Construction of residence at Ancon for Judge H. A. Gudger authorized ... 6
Regulations, paragraphs 4, 9, and 11 of, amended ... 10
Carriage, each Commissioner to be provided with ... 4
Clubs, appointment of two assistant secretaries for, authorized ... 4, 11
Contracts—
Purchase of material and supplies—
Acting head of Purchasing Department authorized to sign ... 13
Action of acting head of Purchasing Department in signing previous, approved ... 13
Employees—
Conditions of employment, paragraph 4 re transportation of members of families changed ... 20
Families of, allowance of furniture to, fixed ... 7
Leave of absence—
Annual—
Granted Thomas C. Thompson and record as to status corrected ... 8
Payment in United States of salary for period of, authorized—
Bryan, T. A ... 7
Dearborn, F. M ... 3
Less one week, upon resignation of employee after two years' service ... 6
Provisions covering extended to Dr. H. A. Lewis ... 8
Sick—
Application of provisions covering, in case of injury, fixed ... 14
Payment for thirty days authorized to Antonio N. Gonzales ... 14
Thirty days granted Panai Correndes ... 8
Quarters—
Bachelor, not to be furnished non-American citizens engaged on Isthmus ... 13
Paragraph 7 re providing bachelor and family, changed ... 20
Licenses, liquor, renewal of, to Melchor R. Esquival, authorized ... 11
Liquor, regulations governing sale of, amended ... 4
Minutes, printing of, in semiannual volumes authorized ... 20

RESOLUTIONS—Continued. Page.
Isthmian Canal Commission—Continued.
Panama Canal—
Changes in locks and dams at southern terminus, approved 25
Increase in width of locks, approved 25
Panama Railroad Company—
Amendment of contracts with Commission for leasing premises, approved 20
Amount of monthly charge for transportation of canal officials and employees increased 12, 16
Not liable to restore premises leased from Commission if destroyed by elements 20
Physicians, rules governing treatment of persons by, amended 14
Removal of Tracy Smail's saloon, approved 21
School-teachers, construction of special quarters for, not deemed expedient 13
Students, special transportation rate to United States to be granted 9
Taxes and licenses, section 7 of regulations providing for certain, amended 9
Transportation, deduction from wages due laborers on account of, not to be made in case of death from injury or disease contracted in line of duty 3
Traveling expenses, allowances for, enumerated in Circular No. 20 extended to Inspectors of Joint Inspecting Engineer's Office 12
Water and sewers, rules governing sanitary installation of, amended 11
SALARIES:
Employees. See *Various Departments.*
SANITATION, DEPARTMENT OF:
Personnel, changes in, approved 15
SCHOOLS:
Teachers, construction of special quarters for, not deemed expedient 13
SECRETARY OF WAR. See *Taft, William H.*
SEWERS:
Rules governing sanitary installation of—
Amended 11
Executive Order amending section 5 15
System, contract to reimburse United States for cost of installation and maintenance of, approved 6
SMAIL, TRACY:
Removal of saloon approved 21
STUDENTS:
Peruvian, special transportation rate to be granted to, from Colon to New York and return 8
SUPPLIES. See *Material and Supplies.*
TAFT, WILLIAM H.:
Executive Orders. See *Executive Orders.*
TAXES:
Section 7 of regulations providing for certain, amended 9
THOMPSON, THOMAS C.:
Leave of absence with pay granted 7
TRANSPORTATION:
Employees. See *Employees.*
Laborers. See *Laborers.*

TRANSPORTATION—Continued. Page.
Panama Railroad Steamship Company, special rate on, to be granted Peruvian students from Colon to New York and return 8
TRAVELING EXPENSES:
Allowances enumerated in Circular No. 20 extended to Inspectors of Joint Inspecting Engineer's Office 12
VEHICLES:
Each Commissioner to be provided with suitable carriage 4
WAR, SECRETARY OF. See *Taft, William H.*
WASHINGTON OFFICE:
Personnel, changes in, approved 8
WATER:
Rates—
Approval of 16
Revised draft of contract with Panama Government approved 6
Rules Governing Sanitary Installation of—
Amended 11
Executive Order amending section 5 15
System, contract to reimburse United States for cost of installation and maintenance of, approved 6
WHARVES:
Panama Railroad Company not liable to restore to Commission in original condition if destroyed by elements 20

O

UNIVERSITY OF FLORIDA
3 1262 08543 7225